11) Publication number:

0 372 397 A3

(12

EUROPEAN PATENT APPLICATION

(21) Application number: 89122118.6

(51) Int. Cl.5: **B64G** 1/28

(22) Date of filing: 30.11.89

3 Priority: 09.12.88 US 282418

Date of publication of application:13.06.90 Bulletin 90/24

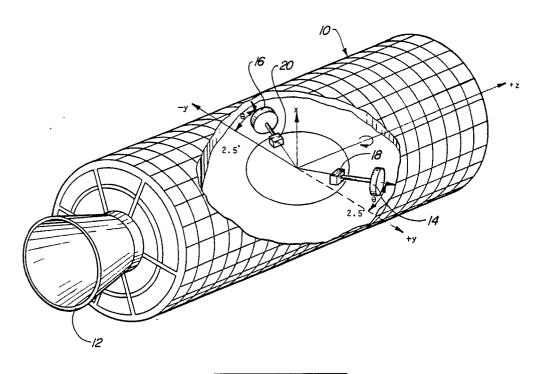
Designated Contracting States:
DE FR GB IT

Bate of deferred publication of the search report: 31.10.90 Bulletin 90/44

- 71 Applicant: Hughes Aircraft Company 7200 Hughes Terrace P.O. Box 45066 Los Angeles, California 90045-0066(US)
- Inventor: Salvatore, Jeremiah O.
 316 Calle Andalucia
 Redondo Beach California 90277(US)
- Representative: Witte, Alexander, Dr.-Ing. Augustenstrasse 7 D-7000 Stuttgart 1(DE)
- Spin stabilization via momentum wheels or similar devices.
- A spacecraft (10) incorporating momentum sources such as spinning momentum wheels (14, 16) having momentum vectors or components thereof oriented along the desired axis (z) of rotation of the spacecraft (10). The rotation axis (z) of the spacecraft (10) is nominally any one of the three principle momentum of inertia axes of the body.

Proper adjustment of the spin rate of the main body relative to the magnitude of the moment sources angular momentum will insure that the spacecraft (10) will spin about the desired axis (z) in a passively stable way even though the rotational axis is not the principle axis of maximum moment of inertia.





EUROPEAN SEARCH REPORT

ΕP 89 12 2118

Category	Citation of document with indicat of relevant passage		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)	
х	US-A-4275861 (HUBERT)		1-10	B64G1/28	
`	* column 2, lines 47 - 55 *	:	1 10	50 101, 25	
	* column 3, lines 35 - 45 *			•	
	* column 4, lines 56 - 66 *				
	* column 5, lines 46 - 53 *				
	* column 6, line 60 - colum				
	* column 10, lines 4 - 65 *				
	* column 11, lines 1 - 16 * * column 13, lines 3 - 49 *				
	* figures *				
	ED 4 02COC12 (MATDA)		1-10		
	FR-A-2369612 (MATRA) * page 1, lines 36 - 38 *		1 10		
	* page 1, line 30 - 30 * * page 2, line 24 - page 3,	lino 1 *	İ		
	<pre>* page 2, line 24 - page 3, * page 5, lines 5 - 12 *</pre>	Tine 1			
	* figures *]		
		•	•		
				:	
			ļ	TECHNICAL FIELDS	
				SEARCHED (Int. Cl.5)	
			1		
				B64G	
				B64C	
				G05D	
			1		
	The present search report has been o	Irawn up for all claims			
				Examiner	
Place of search THE HAGUE		Date of completion of the search 22 AUGUST 1990	i	ESTRELA Y CALPE J.	
	CATEGORY OF CITED DOCUMENTS	T: theory or pr	inciple underlying th nt document, but nut	e invention dished on, or	
	rticularly relevant if taken alone	after the fill	ing date		
Y: pa	THE HAGUE CATEGORY OF CITED DOCUMENTS	T: theory or pr E: earlier pater after the fill D: document c	EST inciple underlying the document, but put	RELA Y CA e invention olished on, or	

EPO FORM 1503 03.82 (P0401)

- A: technological background
 O: non-written disclosure
 P: intermediate document

&: member of the same patent family, corresponding document